

## ABSTRACT

We have identified and purified to homogeneity from lymphatic tissues a novel 8.4 kDa immunophilin that specifically and avidly binds the immunosuppressant drugs tacrolimus ( $K_d=0.8$  nM) and sirolimus ( $K_d=0.08$  nM) and their pharmacologically active metabolites and derivatives, but does not bind cyclosporin A. The isolated 8.4 kDa protein was analyzed for partial amino acid sequence, molecular weight, binding constants, binding specificity, biochemical aspects, and utility as the protein binding reagent in binding assays for immunosuppressant drugs in fluid samples, including patient blood.